



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,872	03/16/2004	Hiromi Inada	H6810.0025/P025-A	1560
24998	7590	08/26/2004	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP			MOUTTET, BLAISE L	
2101 L STREET NW			ART UNIT	
WASHINGTON, DC 20037-1526			PAPER NUMBER	
			2853	
DATE MAILED: 08/26/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,872

Applicant(s)

INADA ET AL.

Examiner

Blaise L Mouttet

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/871,739.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/16/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: CLAIMS OF 091871739

DETAILED ACTION

Priority

1. This application has been filed as a continuation of US patent application 09/871739. The file history of application 09/871739 has been considered by the examiner.

Information Disclosure Statement

2. The IDS submitted March 16, 2004 has been received. It is noted that two of the foreign patent documents cited have been referenced by foreign application number instead of publication number. The examiner has corrected this in the signed copy.

Claim Objections

3. Claims 37 and 38 are objected to because in claim 37, line 6 and claim 38, line 6 “..view the..” should read --view of the--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2853

4. Claims 37 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Adams et al. US 5,466,934.

Adams et al. discloses, regarding claim 37, an electron microscope comprising:
a support (22) for supporting a specimen (24) (column 3, lines 5-9);
a deflector for deflecting an electron beam to the specimen to form images (not shown but inherent for the "electron steering" of column 3, lines 51-54);
an image pickup device (26) for obtaining the images (column 3, lines 10-22);
a processor (44) coupled to the image pickup device (26) being programmed for observing the specimen in a field of view of the electron microscope (column 3, lines 54-60), said programming comprising the acts of:

calculating a degree of coincidence of images obtained by differential conditions (figure 3, step 98, column 6, line 58 – column 7, line 5);

determining whether the image of the field of view is suitable or not for an observation based on calculated degree (figure 3, step 100, column 7, lines 6-8); and

moving the field of view to a next position when the image of the field of view is determined to be not suitable (figure 3, step 102, step 90, column 7, lines 9-17).

Adams et al. discloses, regarding claim 37, a method of observing a specimen in a field of view of an electron microscope comprising the acts of:

deflecting an electron beam to the specimen to form images (figure 3, step 68, column 5, lines 1-15);

acquiring said images from the specimen using an image pickup device (figure 3, step 70, column 5, lines 16-24);

Art Unit: 2853

observing the images in a field of view of the electron microscope using programming from a processor (control loop of figure 3, steps 72-102), said programming including the acts of:

calculating a degree of coincidence of images obtained by differential conditions (figure 3, step 98, column 6, line 58 – column 7, line 5);

determining whether the image of the field of view is suitable or not for an observation based on calculated degree (figure 3, step 100, column 7, lines 6-8); and

moving the field of view to a next position when the image of the field of view is determined to be not suitable (figure 3, step 102, step 90, column 7, lines 9-17).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 2853

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. US 5,466,934 in view of Dougherty US 3,700,801.

Adams discloses an electron microscope with a support (22), deflector, image pickup device (26) and processor (44) as indicated in the 35 USC 102 rejection above.

Adams fails to disclose that the calculation of the degree of coincidence is a calculation of a phase-only correlation or a phase-amplitude correlation.

Dougherty discloses a phase only image correlation method to find differential data which has minimum sensitivity to distortion or other disturbances (column 5, lines 28-38 and lines 51-65) and that this image processing method may be applied to various fields of endeavor involving image processing (column 1, lines 15-23).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the phase only correlation method of Dougherty to find the differential data of the images of Adams et al.

The motivation for doing so would have been to find the degree of coincidence with minimal distortion as suggested by column 5, lines 28-38 of Dougherty.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

Art Unit: 2853

F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 37-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 19, 20 and 21 of copending Application No. 09/871739 (as allowed June 1, 2004).

Regarding claims 37 and 38 of the current application, claim 19 of 09/871739 recites comparable limitations to the support, deflector, image pickup device and processor. Claim 19 of 09/871739 more specifically claims the image as a transmission image and that the processor is programmed to perform initial setting, moving, illuminating and adjusting steps but still encompasses the full scope of the currently presented claim 37. Claim 38 includes an additional specification that phase-only or phase-amplitude correlation is calculated but these limitations are found in claims 20 and 21 of 09/871739.

Regarding claim 39 of the current application, claim 1 of 09/871739 recites comparable limitations wherein the deflecting step is comparable to the moving of the field of view in claim 1 of the '739 application, the acquiring and observing steps are comparable to the illuminating and adjusting steps in claim 1 of the '739 application and the calculating, determining and moving steps are equivalent to the calculating,

Art Unit: 2853

determining and moving steps of the '739 application. While claim 1 of the '739 fails to recite that the method is performed under control of a processor it would have been obvious for a person of ordinary skill in the art at the time of the invention to do so in order to automate the method.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Blaise Mouttet who may be reached at telephone number (571) 272-2150. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier, Art Unit 2853, can be reached at (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Blaise Mouttet August 19, 2004

Bm 8/19/2004


LAMSON NGUYEN
PRIMARY EXAMINER
08/19/04